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About the monthly Water Level bulletin

January Precipitation Over the Great Lakes

As a percentage of the long-term January average:

Great Lakes Basin 78%

Lake Erie (including Lake St. Clair) 76%

Lake Superior 86%

Lakes Michigan-Huron 78%

Lake Ontario 68%

Note: These figures are preliminary.

January Outflows

LEVEL news

Volume 9, Number 2 **February 8, 2001**

Water Levels Decline on All Lakes except Ontario

Low Lake Level Conditions Likely to Continue

Water levels on Lakes Superior, Michigan-Huron and Erie continued to decline from December through January whereas Lake Ontario rose by about 2 cm.

The ice conditions in the Detroit River that caused a 35 cm increase in Lake St. Clair levels from December 10th to the 31st eased at the beginning of January. As result, the lake's level dropped 33 cm from the beginning to the end of the month.

Lakes Superior and Michigan-Huron began February about 36 and 57 cm below their long-term averages, respectively. Both lakes are about 17 cm above their period-of-record lows for this time of year. Lakes St. Clair, Erie and Ontario were 17, 22 and 8 cm below average, respectively, at the beginning of February.

Year 2000 in Review

Great Lakes water levels in 2000 were below average as a result of low water supplies to the lakes that began in 1997 on the upper lakes. Lakes Superior and Michigan-Huron levels declined below those experienced in 1999 and ended 2000 about 17 cm above their period-of-record lows. Some rebound in lake levels occurred on Lakes Erie and Ontario during the spring. Lake Erie levels were just slightly below average from July through October. Lake Ontario levels rose above average from May through October; however, water levels on both lakes fell below average by the end of the year.

Due to the below-average flows in the St. Lawrence River, Montréal Harbour levels were below average throughout 2000. New record low monthly mean levels were set in February, October and November. Precipitation in December and ice cover formation in the river below Montréal raised levels at the harbour from mid-December to the end of the year.

Problems associated with the low water levels experienced in 2000 included below-average hydropower generation at plants located on the St. Marys, Niagara and St. Lawrence rivers, reduced water depths for commercial navigation and unusable recreational boating facilities. Shallow shore-wells

From the Great Lakes

As a percentage of the long-term January average:

Lake Superior 80%

Lake Erie 92%

Lake Huron 92%

Lake Ontario 94%

Note: These figures are preliminary.

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were affected and there were additional operating costs related to water withdrawal for some domestic and industrial users.

There were no reports of serious flood and erosion damage on the shores of the Great Lakes and the St. Lawrence River during the year. A major storm did occur on December 11th and 12th with sustained southwest winds in the 60 knot range over Lake Erie. The resulting storm surge at the eastern end of the lake was one of the largest on record, but fortunately lasted only two hours and occurred at a time of below-average static water levels.

The regulation plan for Lake Superior performed as designed to help balance the water level conditions upstream on Lake Superior and downstream on Lakes Michigan-Huron.

There were some deviations from the Lake Ontario regulation plan during the year. Lake Ontario outflows were reduced to less than specified by the plan during the spring and thus some water was conserved on Lake Ontario. The stored water was used during the fall to provide relief from the low water level conditions at Montréal Harbour.

Summary information for "LEVEL*news*"

Water Level Forecast

The water levels of the Great Lakes fluctuate according to weather conditions. Since it is not possible to accurately forecast weather conditions several months in advance, the probable range of future levels presented for each lake in the Monthly Water Level Bulletin is determined assuming wet and dry supply conditions for the next six months.

The precipitation received regionally over the remainder of winter and into spring will provide an early indication of water level conditions that can be expected this summer. Should dry conditions prevail, the levels of Lakes Superior, Michigan-Huron and St. Clair will decline further away from average, but remain above their record minimum values. If wet conditions are experienced, the levels on these lakes will equal or exceed those experienced during 2000, but still remain well below average. Since actual water levels are likely to fall somewhere within the probable ranges provided, low water level conditions will continue to cause concern for Great Lakes-St. Lawrence River basin interests for the foreseeable future.

Lakes Superior and Ontario Regulation

The regulation plan for Lake Superior continues to specify very low outflows in response to the very low water level conditions on that lake.

Lake Ontario outflows during February are also expected to be those specified by the lake's regulation plan. Ice cover formation in the critical areas of the St. Lawrence River both upstream and downstream of Cornwall was essentially complete by January 22nd.

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